

ABSTRACT OF THE DISCLOSURE

A semiconductor laser element has the following structure. In the clad layer, a difference in a light radiation loss between the basic horizontal-lateral mode and the 1st-order horizontal-lateral mode is 10 cm^{-1} or more. The refractive index of the clad layer is below an effective index against light in the basic horizontal-lateral mode, and the refractive index of the clad layer is equal to or more than an effective index against light in the 1st-order horizontal-lateral mode. The upper clad layer is provided only above a portion of the active layer, and thus is at least included in the ridge-stripe structure. This structure inhibits the I-L characteristic from suffering kink and realizes oscillations in the basic horizontal-lateral mode until output power reaches as high as 60–100 mW, in a peak output power of the semiconductor laser element at the time of a pulse current operation. This structure also enables the FFP to have an ellipticity of close to 1, thus making the spot of the semiconductor laser element close to a circular shape.